### PATENT COOPERATION TREATY

WO 97/16452 PCT/EP96/04573 Beierge: 13

		From the INTERN	NATIONA <u>L BURE</u>	AU
NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES  (PCT Rule 47.1(c), first sentence)  Date of mailing (day/month/year)		To:	Fles	sort Patento
		TOVARTIS AG Paten land Era Lyber Walfaste HH 4002 Baste SUISS Es Es III	idemark Dept.	Post / Termine PATHUN PATE
09 May 1997 (09.05.97)		JAN CO	- Installation	SES
Applicant's or agent's file reference 4-20624/A		135 15 VE	T NOT	
International application No.	International filing da	ite (day/month/year)	Priority date (day/m	nonth/year)
PCT/EP96/04573 V	22 October 19	996 (22.10.96)	01 Novembe	er 1995 (01.11.95)
Applicant NOVARTIS AG et al				

 Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:

AU,BR,CA,CN,CZ,EP,IL,JP,KP,KR,NO,PL,RO,SK,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have saved the requirement for such a communication at this time:

AL,AP,BA,BB,BG,CU,EA,EE,GE,HU,IS,LC,LK,LR,LT,LV,MG,MK,MN,MX,NZ,OA,SG,SI,TR,TT,UA,UZ,VN

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on 09 May 1997 (09.05.97) under No. WO 97:16452

#### REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

#### REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The voice of the v			
	7661 isM .0 S Ex	STERFASSUNG Vis	um: M
The International Bureau of WIPO	Authorized officer	VEITERFASSUNG Vis	oum: CUY
34, chemin des Colombettes 1211 Geneva 20, Switzerland		J. Zahra	J
Facsimile No. (41-22) 740.14.35	Telephone No. (41	22) 730.91.11	

### **PCT**

### WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



### INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup>: C07D 473/16, 473/00, 473/40

(11) International Publication Number:

WO 97/16452

3/16, 4/3/00, 4/3/40

(43) International Publication Date:

9 May 1997 (09.05.97)

(21) International Application Number:

PCT/EP96/04573

(22) International Filing Date:

22 October 1996 (22.10.96)

(30) Priority Data: 3094/95 2213/96

1 November 1995 (01.11.95) CH 10 September 1996 (10.09.96) CH

(71) Applicant (for all designated States except US): NOVARTIS

AG [CH/CH]; Schwarzwaldallee 215, CH-4058 Basle (CH).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): ZIMMERMANN, Jurg [CH/CH]; Ahornweg 622, CH-4323 Wallbach (CH). CAPRARO, Hans-Georg [CH/CH]; Habsburgerstrasse 60, CH-4310 Rheinfelden (CH). PETERLI, Patricia [CH/CH]; Metzerstrasse 15, CH-4056 Basle (CH). FURET, Pascal [FR/FR]; 24, rue du Riegelsbourg, F-68800 Thann (FR).
- (74) Common Representative: NOVARTIS AG; Patent and Trademark Dept., Klybeckstrasse 141, CH-4002 Basle (CH).

(81) Designated States: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, IP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

#### Published

With international search report.

- (54) Title: PURINE DERIVATIVES AND PROCESSES FOR THEIR PREPARATION
- (57) Abstract

2-Amino-6-anilino-purine derivatives of formula (1) in which the symbols are as defined in claim 1, are described. These compounds inhibit p34cdc2/cyclin Bcdc13 kinase and can be used for treatment of hyperproliferative diseases, for example tumour diseases.

$$\begin{array}{c|c}
(R_1)_q \\
N & R_2 \\
N & R_3 \\
N & R_4
\end{array}$$

$$\begin{array}{c|c}
(R_3)_m & (1) \\
R_5 & N & N \\
N & N & N \\$$



### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 4-20624/A	FOR FURTHER ACTION	see Notification of (Form PCT/ISA/	of Transmittal of International Search Report (220) as well as, where applicable, item 5 below.
nternational application No.	International filing date(	day/month/year)	(Earliest) Priority Date (day/month;year)
PCT/EP 96/04573	22/10/19	96	01/11/1995
pplicant			
CIBA-GEIGY AG et al.			
This International Search Report has baccording to Article 18. A copy is being			thority and is transmitted to the applicant
This International Search Report cons  It is also accompanied by a c	ists of a total of 3 opy of each prior art docume		rL .
1. X Certain claims were found un	searchable (see Box I).		
2. Unity of invention is lacking (	see Box II).		
	contains disclosure of a <b>nucle</b> ied out on the basis of the seq		acid sequence listing and the
	iled with the international app		
f	urnished by the applicant sepa	•	
			ne effect that it did not include international application as filed.
1	ranscribed by this Authority		
4. With regard to the title, X t	he text is approved as submitt	ed by the applicant.	
t	he text has been established by	y this Authority to	read as follows:
5. With regard to the abstract,			
<u> </u>	he text is approved as submitt		3.2(b), by this Authority as it appears in
L F		ithin one month fro	m the date of mailing of this International
6. The figure of the drawings to be p	ublished with the abstract is:		
Figure No a	s suggested by the applicant.		None of the figures.
	ecause the applicant failed to	suggest a figure.	
<u></u>			



Box 1 Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)	
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:	
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:  Although claim 13 is directed to a method of treatment of (diagnostic method practised on) the human/animal body the search has been carried out and based on the alleged effects of the compound/composition.	
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:	
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).	
Box 11 Observations where unity of invention is lacking (Continuation of item 2 of first sheet)	
This International Searching Authority found multiple inventions in this international application, as follows:	
·	
1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.	
2. As all searchable claims could be searches without effort justifying an additional fee, this Authority did not invite payment of any additional fee.	
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:	
No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:	
Remark on Protest  The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.	

A. CLASS IPC 6	CO7D473/16 CO7D473/00 CO7D47	3/40			
According	to International Patent Classification (IPC) or to both national cla	assification and IPC			
	S SEARCHED				
Minimum d IPC 6	ocumentation searched (classification system followed by classifi CO7D	cation symbols)			
Documenta	tion searched other than minimum documentation to the extent th	at such documents are included in the fields	earched		
Electronic	lata base consulted during the international search (name of data	base and, where practical, search terms used)			
C. DOCUM	MENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where appropriate, of the	e relevant passages	Relevant to claim No.		
A	EP,A,0 212 535 (BOEHRINGER MANN 4 March 1987 see claims	HEIM GMBH)	1-16		
A	WO,A,90 09178 (WHITBY RESEARCH INCORPORATED) 23 August 1990 see page 22 - page 29; claims		1-16		
Furt	her documents are listed in the continuation of box C.	Patent family members are listed	in annex.		
*Special categories of cited documents:  A' document defining the general state of the art which is not considered to be of particular relevance  E' earlier document but published on or after the international filing date  L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  O' document referring to an oral disclosure, use, exhibition or other means  Odcument published prior to the international filing date but later than the priority date claimed  Date of the actual completion of the international search  Taleter document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  Cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document is combined with one or more other such documents is combined with one or more other such documents is combination being obvious to a person skilled in the art.  A' document member of the same patent family  Date of mailing of the international search report			ch the application but theory underlying the claimed invention to be considered invention are the theory of the theo		
3	February 1997	1 2. 02. 97			
Name and	Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentiaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016  Authorized officer  Luyten, H				

1

## INT NATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/EP 96/04573

Patent document cited in search report	Publication date	Patent family member(s)		Publication date	
EP-A-212535	04-03-87	DE-A- JP-B- JP-A- US-A-	3529497 6092407 62045588 4853386	26-02-87 16-11-94 27-02-87 01-08-89	
WO-A-9009178	23-08-90	AU-B- AU-A- EP-A- US-A-	626983 4941490 0457773 5565566	13-08-92 05-09-90 27-11-91 15-10-96	

# PATENT COOPERATION TREATY

PARALLONIA 1MAY	7 1008 From the INTERNATIONAL BUREAU
17. April 1993 <b>POT</b> 4	То:
NOTIFICATION OF THE RECORDING OF A CHANGE  (PCT Rule 92bis.1 and Administrative Instructions, Section 422)  Date of mailing (day/month/year) 14 April 1998 (14.04.98)	NOVARTIS AG Patent and Trademark Dept. Klybeckstrasse 141 CH-4002 Basle SUISSE  Appl. Specialist
Applicant's or agent's file reference 4-20624/A	IMPORTANT NOTIFICATION
International application No. PCT/EP96/04573	International filing date (day/month/year) 22 October 1996 (22.10.96)
The following indications appeared on record concerning:      X the applicant      X the inventor	the agent the common representative
Name and Address  PETERLI, Patricia  Metzerstrasse 15  CH-4056 Basle  Switzerland	State of Nationality State of Residence CH CH Telephone No.  Facsimile No.
	Teleprinter No.
The International Bureau hereby notifies the applicant that the the person X the name X the add	
Name and Address IMBACH, Patricia Gstaltenrainweg 80 CH-4125 Riehen	State of Nationality State of Residence CH CH Telephone No.
Switzerland	Facsimile No.
	Teleprinter No.
3. Further observations, if necessary:	·
4. A copy of this notification has been sent to:	
X the receiving Office the International Searching Authority X the International Preliminary Examining Authority	the designated Offices concerned  X the elected Offices concerned  other:
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer  Céline Faust  Telephone No.: (41-22) 338.83.38

### INTER-TIONAL SEARCH REPORT

Inter. And Application No PCT/EP 96/04573

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 C07D473/16 C07D473/00 C07D473/40 01 MAY 1998" According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 6 CO7D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages EP.A.O 212 535 (BOEHRINGER MANNHEIM GMBH) 1-16 A 4 March 1987 see claims 1-16 WO.A.90 09178 (WHITBY RESEARCH A INCORPORATED) 23 August 1990 see page 22 - page 29; claims Patent family members are listed in annex. Further documents are listed in the continuation of box C. IX I \* Special categories of cited documents: "I" later document published after the international filing data or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone filing date document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docudocument referring to an oral disclosure, use, exhibition or its, such combination being obvious to a person skilled document published prior to the international filing date but later than the priority date claimed in the art. '&' document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 1 2 02 97 3 February 1997 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijawijk Td. (+31-70) 340-2040, Tx. 31 651 epo nl, Luyten, H Fax: (+31-70) 340-3016

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### INTERNATIONAL SEARCH REPORT

\*- remational application No.

PCT/EP 96/04573

Box I	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This Int	ernational Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1.	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: Although claim 13 is directed to a method of treatment of (diagnostic method practised on) the human/animal body the search has been carried out and based on the alleged effects of the compound/composition.
2.	Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Rox II	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This Inte	rnational Searching Authority found multiple inventions in this international application, as follows:
1. 🔲	As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2	As all searchable claims could be searches without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3	As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.	No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is estricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on	The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.

### INTERNATIONAL SEARCH REPORT

Information on patent family members

Inter nal Application No PCT/EP 96/84573

Patent document cited in search report	Publication date	Patent family member(s)		Publication date	
EP-A-212535	04-03-87	DE-A- JP-B- JP-A- US-A-	3529497 6092407 62045588 4853386	26-02-87 16-11-94 27-02-87 01-08-89	
WO-A-9009178	23-08-90	AU-B- AU-A- EP-A- US-A-	626983 4941490 0457773 5565566	13-08-92 05-09-90 27-11-91 15-10-96	

### **PATENT COOPERATION TREATY**

REC'D	0 3 DEC 1997
WIFO	
	09/05/82

## **PCT**

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

			(PC) Article 36 and F	ruie /C	<i>'</i> )
Applicant's or	agen	t's file reference	FOR FURTHER ACTION		Notification of Transmittal of International
4-20624/A			. on rommen action	Prei	iminary Examination Report (PCT/IPEA/416)
nternational	applica	ation No.	International filing date (day/month/ye	ear)	Priority date (day/month/year)
PCT/EP96	/045	73	22/10/1996		01/11/1995
nternational	Patent	Classification (IPC) or na	tional classification and IPC		
C07D473/	16				•
					~
Applicant					
NOVARTIS	SAG	et al.			
		·····		<del></del>	
				by this In	ternational Preliminary Examining Authority
and is t	ransn	nitted to the applicant a	according to Article 36.		
0 This DE	- DO 0	IT consists of a total of	7 choote including this source of	oot	
Z. INIS HE	-PUH	i consists of a total of	7 sheets, including this cover sh	ieet.	
			ed by ANNEXES, i.e., sheets of th		
wh	nich h	ave been amended ar	d are the basis for this report and 70.16 and Section 607 of the Ad	or sheets	s containing rectifications made
De	noie t	ms Authority (see Hule	70.10 and decilon 607 of the Adi	illingi ati	ve instructions under the FO1).
These	annex	ces consist of a total of	sheets.		
3. Inis re	роп с	ontains indications rei	ating to the following items:		
1	$\boxtimes$	Basis of the report			
11		Priority			
III	$\boxtimes$	Non-establishment of	f opinion with regard to novelty, in	ventive s	tep and industrial applicability
IV		Lack of unity of inve	ntion		
V	⊠			novelty,	inventive step or industrial applicability;
	_	•	ations supporting such statement		
VI		Certain documents of			
VII			e international application		
VIII	×	Certain observations	on the international application		
Date of subr	nissioi	n of the demand	Date of c	completion	of this report
05/03/1997					n 1. 12. <b>97</b>
03/03/198					<u>-</u>
Name and n	nailing	address of the IPEA/	Authoriz	ed officer	35003 MJ.
	Fur	opean Patent Office			Edward St.
		0298 Munich	Goss,	l	
Tel. (+49-89) 2399-0, Tx: 523656 epmu d			•	no No. ( . 4	0.80) 2300.8303

International application No. PCT/EP96/04573

### I. Basis of the report

1.	resp	This report has been drawn on the basis of (substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.):					
	Description, pages:						
	1-82	2	as originally filed				
	Clai	ims, No.:					
	1-16		as originally filed				
_	<b>T</b> L .						
2.	ıne	amendments nave	e resulted in the cancellation of:				
		the description,	pages:				
		the claims,	Nos.:				
		the drawings,	sheets:				
3.			een established as if (some of) the amendments had not been made, since they have been beyond the disclosure as filed (Rule 70.2(c)):				
4.	Add	ditional observation	s, if necessary:				

International application No. PCT/EP96/04573

II. I	Pric	prity
1. [		This report has been established as if no priority had been claimed due to the failure to furnish within the prescribed time limit the requested:
		☐ copy of the earlier application whose priority has been claimed.
		☐ translation of the earlier application whose priority has been claimed.
2. [		This report has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid.
Thu	s fo	r the purposes of this report, the international filing date indicated above is considered to be the relevant date
3. <i>F</i>	۱dd	itional observations, if necessary:
III.	No	n-establishment of opinion with regard to novelty, inventive step and industrial applicability
		estions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), industrially applicable have not been examined in respect of:
[	_	the entire international application.
9	<b>X</b>	claims Nos. 13.
bec	aus	e:
Ç	×	the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination ( <i>specify</i> ):
		see Separate Sheet
(		the description, claims or drawings (indicate particular elements below) or said claims Nos. are so unclear that no meaningful opinion could be formed (specify):
[	<b>-</b>	the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
ſ		no international search report has been established for the said claims Nos

International application No. PCT/EP96/04573

IV. Lack of unity of invention								
1. In response to the invitation to restrict or pay additional fees the applicant has:								
		restricted the claims						
		paid additional fees.						
		paid additional fees unde	er prote	st.				
		neither restricted nor pai	d additi	onal fees				
2.		This Authority found that the requirement of unity of invention is not complied and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.						
3.	This	s Authority considers that	of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is					
		complied with.						
		not complied with for the	followi	ng reasor	ns:			
4.		nsequently, the following parts of the international application were the subject of international preliminary amination in establishing this report:						
□ ali parts.								
		the parts relating to clair	ns Nos.	•				
٧.		Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
1.	1. Statement							
	No	velty (N)	Yes: No:	Claims Claims	1-16			
	Inv	entive step (IS)	Yes: No:	Claims Claims	1-16			
	Ind	ustrial applicability (IA)	Yes: No:	Claims Claims	1-12,14-16 13			

2. Citations and explanations

see Separate Sheet

International application No. PCT/EP96/04573

#### VI. Certain documents cited

- 1. Certain published documents (Rule 70.10)
- 2. Non-written disclosures (Rule 70.9)

### VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

### VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see Separate Sheet

### **EXAMINATION REPORT - SEPARATE SHEET**

### Novelty

With regard to the requirements for novelty the essential structural difference between the subject-matter claimed and that of D1 = EP-A-0 212 535 and D2 = WO-A-90 09178 resides in the presence of the  $(R_1)_a$ -anilino group at position 6 of all three classes of the compounds claimed (namely compounds of general formula I, II as well as V). The subject-matter claimed thus appears to be novel.

### Inventive step

The problem underlying the present application, as stated by the Applicant, is to provide compounds having particularly valuable activity in treating hyperproliferative diseases, such as tumours and psoriasis.

D1 describes structurally related compounds however acting as antiallergic agents. D2 also relates to structurally related compounds being adenosine receptor antagonist useful in a different pharmacological field.

The solution proposed by the Applicant resides in the provision of the present compounds being 2-amino-6-anilino-purine derivatives substituted by the relevant distinguishing group attached at the 6 position (see novelty analysis above).

Data are given on pp. 18 to 20 where the compounds are assessed for their in vitro as well as in vivo activity however without any precise reference to which compounds have been actually tested. In this respect the Applicant is reminded that in order to judge if the compounds tested are indeed representative for the broadly defined matter for which protection is sought, further evidence is kindly required (as to what the general statements on pp.18 and 19 "the compounds of the formula I ... have an IC<sub>50</sub> of.." exactly referred to).

Thus an inventive step cannot at present been recognized.

### **Industrial Applicability**

For the assessment of the present Claim 13 on the question whether it is industrially applicable, no unified criteria exist in the PCT. The patentability can also be dependent upon the formulation of the claims. The EPO, for example, does not recognize as

### **INTERNATIONAL PRELIMINARY EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP96/04573

industrially applicable the subject-matter of claims to the use of a compound in medical treatment, but will allow, however, claims to a known compound for first use in medical treatment and the use of such a compound for the manufacture of a medicament for a new medical treatment.

### Clarity

In claims 1 and 2 each of the terms "lower" or "optionally substituted" as well as the terms coming out from their combination should be specified in accordance with the description pp.1 to 7 (in order to clearly defined  $R_4$  or  $R_5$ , claim 2 should be introduced into claim 1).

R<sub>4</sub> means i.a. acyl having 1-30 C atoms. Since a C<sub>1</sub> acyl does not exist, the Applicant should remove this defect.